REMARKS

Claims 3-7, 10-15 and 17-20 are now pending in the present application. Claims 3-7, 10, 11, 17 and 18 have been amended and claims 1, 2, 8, 9 and 16 have been canceled by the present amendment or a previous amendment without prejudice to or disclaimer of the subject matter contained therein. Claims 7 and 11 are independent. Reconsideration of this application, as amended, is respectfully requested.

Reasons for Entry of Amendments

It is respectfully requested that the present amendments be entered into the official file in view of the fact that the amendments to the claims automatically place the present application into condition for allowance. In the alternative, if the Examiner does not believe that the application is in condition for allowance, it is requested that the amendments be entered for the purposes of appeal. The amendments to the claims simplify the issues for appeal by canceling independent claim 1 and amending claims 10 and 18 to depend from independent claims 7 and 11, respectfully.

Rejections Under 35 U.S.C. §§ 102 and 103

Claims 1, 3-7, 11-15 and 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Lobiondo (U.S. Patent No. 5,287,194). Claims 10 and 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lobiondo in view of Ohkubo (U.S. Patent No. 5,123,063). Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lobiondo in view of MacKay (U.S. Patent No. 5,718,520). These rejections are respectfully traversed.

At the outset, it is respectfully pointed out that claims 1 and 16 have been canceled without prejudice to or disclaimer of the subject matter contained therein. Therefore, the Examiner's rejections under 35 U.S.C. § 102 and 103 have been rendered moot with regard to these claims. In addition, independent claims 7 and 11 have been amended to clarify the differences between the present invention and the Lobiondo reference by reciting that printing does not occur without an explicit command.

The Examiner bases his rejections on the Lobiondo patent. Lobiondo discloses an essentially centralized print job handling process, whereas the system of the present invention is essentially decentralized. This means that the print jobs in Lobiondo are allocated to a printer by a central scheduler and cannot be initiated through the local user interface of a printer, let alone a printer selected at will at any moment by a user.

The scheduler 50 of Lobiondo may be located at the print server 60 or at various local workstations 30 in the network (see column 3, lines 41-50), while a workstation can be a local user interface of a printer (see column 3, lines 29-32). In Lobiondo, the print jobs are assigned to a printer by a central scheduler, wherever in the network the scheduler is implemented. However, job allocation is essentially a centrally controlled process, and so is the printer capabilities matching (the scheduler inspects the print queues and selects the printer on the basis thereof).

In the present invention, print jobs are immediately (upon their reception) distributed to all printers (or at least the information about the print jobs is), and it is up to a user located at a printer local user interface selected at his own choice, to start the print process. Accordingly, job allocation is essentially a decentralized process. In addition, the capabilities check is done in the

printer itself, thus also decentrally. Since the printer capabilities are also distributed, the advice about better suited devices is also made and presented decentrally, i.e. locally, without any other device of server knowing about it.

In other words, Lobiondo discloses a print system having several different printers with different capabilities. A print server 60 with a scheduler 50 receives print jobs, analyses them in relation to printer capabilities necessary for processing the jobs, and checks which printers can do the job. The main difference between the system of the present invention is that the Lobiondo system is centrally controlled by the server/scheduler which "pushes" a job to the printer best suited for printing it, while in the present invention, printing is controlled by the connected printers themselves, "pulling" the job from central storage, upon local command from an operator.

Therefore, the user in the Lobiondo system has far less control, since the scheduler selects the printer, and only if that selected printer is not able to do the job, the scheduler enables the user to ask for another printer, which is then again selected by the scheduler. In the present invention, a user walks up to a(ny) printer and calls up the job, whereafter he may start printing that job locally. If the printer decides that it is not capable of printing the job, it warns the user, who may then either abandon the printer and walk up to another one and try again there, or may change the settings of the job so that it can be printed at the current device after all.

In Lobiondo, three different methods are disclosed.

Method 1 (Column 4, last paragraph, and FIG. 4):

- user submits print job, including requested completion time and settings ("criteria") from the work station to a common spooling area;

- scheduler checks which printers are capable;

- scheduler checks availability of capable printers and selects printer (or possibly divides job over plural printers); and

- scheduler informs user of selected printer.

Method 2 (Column 5, first full paragraph):

- user submits job (with printer preselection) to common spooling area;

- scheduler checks print queue of preselected printer, and

- if small load in queue, allocate job to preselected printer and inform user if high load in queue, prompts user for either asking for another printer ($\rightarrow$ scheduler selects a printer) or accepting preselected printer (and delay).

Method 3 (Column 6, lines 8-22):

- user calls up scheduler (may be done from a local printer operator unit);

- scheduler requests job settings ("criteria"), user enters them;

- user inputs job data to common spool area; and

- scheduler checks settings against the printer capabilities, and

  - if a printer can do the job, the scheduler schedules the printer; and

  - if no printer can do the job, the scheduler informs the user and lets him change the settings, after which the job is scheduled.

As may appear from the summaries above, the Lobiondo method is essentially a print job submission process. It unrolls at the moment the user submits his print job to the printer "system" and will typically be handled at the work station of the user. If the print job originates

from a scanned process (that is, it is a copy process), the user interaction is done at the console of the combined scanner/printer.

In the present invention; however, the method is basically performed by the printer and not by a central server. The method of the present invention can be summarized as follows:

- user walks up to the printer and calls up list of received-and-waiting print jobs;

- printer checks every job against its own capabilities and shows list with possible warnings;

- user selects job from list and presses START key;

- if printer can print according to settings, it prints the job; and

- if printer cannot print job according to settings, it shows a warning on the display, together with advice as to what printer can do the job, and

- user may then change the settings and start the job or user may walk to the advice (or other) printer for printing.

Essentially, the print jobs are initiated at the printer console and are checked against printer capabilities by the printer itself. If the printer decides that it cannot process the job according to the associated job settings, it checks the capabilities of the other printers to find out if one of them can do the job and if so, advises the user through its display to walk up to that other printer and start the job there. The only central function of this system is the reception of print jobs and distribution of the job metadata to all connected printers.

Thus, in the present system, a user decides on what printer he wants to print his job, and actually walks up to that printer and starts the process there. If that printer cannot do the job, the user chooses another printer to do it.

In Lobiondo, the scheduler decides where the print job is printed, and the user is only informed of the decision of the scheduler. If the scheduler finds out that the printer of its choice is not available, it enables the user to ask the scheduler to make a new selection. In Lobiondo, printers do nothing else than printing their queues.

Although Lobiondo's method 3 (see column 6, lines 8-49) may appear to the user as more or less similar, the user has to log onto the scheduler (possibly through a printer's operating unit) to get another printer (although he still cannot choose the printer himself), but the control process is quite different. Specifically, the user essentially communicates with the server (albeit through a local user interface of a printer). In contrast, the user in the present invention actually communicates with the printer he is standing at.

With regard to the claims of the present invention, independent claim 7 is directed to the method of processing print files and independent claim 11 is directed to a printer for printing digital print files. Independent claim 7 recites a combination of steps including the recitations "distributing at least the metadata of each received print file to all of said plurality of printers," each of said plurality of printers making each print file available for selection and printing, through respective local operating units of said plurality of printers, but not printing any print files without an explicit command" and "if the printer cannot print the print file in accordance with the settings, automatically advising, through a display of the local operating unit, or at least one other printer that can print said print file in accordance with the settings, but not issuing a print command to said other printers." Applicants respectfully submit that the Lobiondo reference relied on by the Examiner fails to teach or suggest the present invention as recited in independent claim 7.

With regard to independent claim 11, this claim is directed to a printer for printing digital print files. Independent claim 11 recites a combination of elements including "a network connection unit for communicating with the system and for receiving print files having preprogrammed settings, each print file comprising metadata specifying job information and print image data" and "an advising mechanism for advising, in the case that the printer cannot print the print file, of at least one other printer that has the capabilities needed for printing said print file in accordance with said preprogrammed settings, but not issuing a print command to said other printers." Applicants respectfully submit that the Lobiondo reference relied on by the Examiner fails to teach or suggest the present invention as recited in independent claim 11.

In Lobiondo, metadata of all jobs are not distributed to all devices and analyzing metatada of jobs and the printer capabilities check is done by the scheduler, not the printer. Since independent claims 7 and 11 have been amended to clarify that the printers perform these functions, Applicants submit that the Lombiondo reference fails to anticipate the independent claims of the present invention. In addition, in Lobiondo, if the scheduler determines that a particular printer cannot print a print file, the scheduler automatically determines which printer or printers can print the print job and simply notifies the user where the print job is located. Therefore, the advising mechanism of Lobiondo fails to disclose "not issuing a print command to said other printers" as recited in the independent claims of the present invention.

It should also be noted that claim 11 has been amended to include the recitations of dependent claim 16. Claim 16 relied on the combination of Lombiondo and MacKay. With regard to the Examiner's reliance on the MacKay reference, this reference has only been relied on for selecting print files based on metadata. The MacKay reference is also silent with regard to

a printer that receives and stores metadata of a print file as in the presently claimed invention. Therefore, the MacKay reference fails to make up for the deficiencies of Lobiondo.

With regard to dependent claims 3-6, 10, 12-15 and 17- 20, Applicants respectfully submit that these claims are allowable due to their respective dependence upon independent claims 1 and 11, as well as due to the additional recitations in these claims.

In view of the above amendments and remarks, Applicants respectfully submit that claims 3-7, 10-15 and 17-20 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's rejections under 35 U.S.C. §§ 102 and 103 are respectfully requested.

CONCLUSION

For the foregoing reasons and in view of the above clarifying amendments, Applicants respectfully request the Examiner to reconsider and withdraw all of the rejections of record, and earnestly solicit an early issuance of a Notice of Allowance.

Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Paul C. Lewis (Registration No. 43,368) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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